A2 (cont'd)

No._____, filed on November 12, 2001, U.S. Serial No._____, filed on November 12, 2001, and U.S. Serial No._____, filed on November 12, 2001, which are all divisions of U.S. Serial No. 09/191,920. This application is also related to U.S. Serial No. 09/272,443, filed March 19, 1999, which is a continuation of 09/191,920.--.

At page 4, line 14 through page 15, line 1, please delete the entire paragraph, and insert therefor the following:

A3

--This invention also relates to a novel method for the isolation of spermatogonia, comprising obtaining spermatogonia from a mixed population of testicular cells by extruding the cells from the seminiferous tubules and gentle enzymatic disaggregation. The spermatogonia or stem cells which are to be genetically modified, may be isolated from a mixed cell population by a novel method including the utilization of a promoter sequence, which is only active in cycling spermatogonia stem cell populations, for example, b-Myb or a spermotogonia specific promoter, such as the c-kit promoter region, c-raf-1 promoter, ATM (ataxia-telangiectasia) promoter, RBM (ribosome binding motif) promoter, DAZ (deleted in azoospermia) promoter, XRCC-1 promoter, HSP 90 (heat shock gene) promoter, or FRMI (from fragile X site) promoter, optionally linked to a reporter construct, for example, the Green Fluorescent Protein Gene (EGFP). These unique promoter sequences drive the expression of the reporter construct only in the cycling spermatogonia. The spermatogonia, thus, are the only cells in the mixed population which will express the reporter construct and they, thus, may be isolated on this basis. In the case of the green fluorescent reporter construct, the cells may be sorted with the aid of, for example, a FACs scanner set at the appropriate wavelength or they may be selected by chemical methods.--.

At page 10, lines 11-17, please delete the entire paragraph and insert therefor the following:

A4

--"Gene delivery (or transfection) mixture", in the context of this patent, means selected genetic material together with an appropriate vector mixed, for example, with an effective amount of lipid transfecting agent. The amount of each component of the mixture is chosen so that the transfection of a specific species of germ cell is optimized. Such optimization requires no more than routine experimentation. The ratio of DNA to lipid is broad, preferably about 1: 1, although other proportions may also be utilized depending on the type of lipid agent and the DNA utilized. This proportion is not crucial.--.
